

**Specification of Competency Standards**  
**for the Manufacturing Technology Industry**  
**Unit of Competency**

Functional Area - Product Manufacturing

Title	Carry out in-mould decoration
Code	106436L3
Range	This unit of competency is applicable to the production department of the plastic industry corporation. Practitioners should be capable to carry out in-mould decoration
Level	3
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Understand relevant knowledge of all kinds of in-mould decoration</p> <ul style="list-style-type: none"> <li>• Recognise the difference between IML and IMR</li> <li>• Recognise in-mould decoration technology and the final effectiveness, and whether there is an existing suitable in-mould decoration materials in the market</li> <li>• Recognise the methods and techniques of manufacturing films</li> <li>• Recognise the impacts of the requirements of product design, colour pattern and distribution on the film geometry</li> <li>• Recognise methods and techniques of the preformed films, such as thermoforming, vacuum forming, mechanical shearing and laser cutting, so as to produce a three-dimensional in-mould decoration</li> <li>• Understand the principles, characteristics and applications of in-mould decoration</li> <li>• Understand the manufacturing methods, techniques and required equipment of in-mould decoration</li> <li>• Understand the methods and techniques of equipping films, such as using fixed or adsorption device</li> <li>• Understand the coordination between the films and the tooling</li> </ul> <p>2. Apply in-mould decoration in production and carry out evaluation and improvement</p> <ul style="list-style-type: none"> <li>• Determine if the products are suitable for in-mould decoration</li> <li>• Carry out suitable in-mould decoration of products in accordance with different quality requirements</li> <li>• Operate manipulator to take a film, put the film into the in-mould with the plastics and form together</li> <li>• Examine the effectiveness of the production efficiency of in-mould decoration</li> <li>• Analyse the quality problems of in-mould decoration and carry out improvement</li> <li>• Determine the type of defects, prevent and fix defects</li> <li>• Follow safety guidelines, related codes of practice and design requirement, carry out in-mould decoration</li> </ul> <p>3. Professional handling of carrying out in-mould decoration</p> <ul style="list-style-type: none"> <li>• Detailedly consider elements such as safety, risk, productivity, quality, environmental protection and cost, carry out in-mould decoration and meet all aspects of requirements.</li> </ul>
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> <li>• Capable to describe the methods and techniques of equipping films</li> <li>• Capable to make use of tooling, put the film into the in-mould with the plastics and form together</li> </ul>
Remark	